

SEQUENCE LISTING

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MAY 19 2003
TECH CENTER 1600/2900

<110> AMYLIN PHARMACEUTICALS, INC.

<120> NOVEL EXENDIN AGONIST COMPOUNDS

<130> 238/086 US (030639.0043.UTL2)

<140> 09/554,533

<141> 1998-11-13

<150> PCT/US98/24210

<151> 1998-11-13

<150> US 60/065,442

<151> 1997-11-14

<160> 74

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 39

<212> PRT

<213> Heloderma horridum

<220>

<221> AMIDATION

<222> (39)...(39)

<223> amidated Ser (Serinamide)

<400> 1

His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro Pro Pro Ser
35

<210> 2

<211> 39

<212> PRT

<213> Heloderma suspectum

<220>

<221> AMIDATION

<222> (39)...(39)

<223> amidated Ser (Serinamide)

<400> 2

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro Pro Pro Ser
 35

<210> 3
 <211> 30
 <212> PRT
 <213> Homo sapien

<220>
 <221> AMIDATION
 <222> (30)...(30)
 <223> amidated Arg (Argininamide)

<400> 3

His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
 1 5 10 15

Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
 20 25 30

<210> 4
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> VARIANT
 <222> (1)...(7)
 <223> Xaa in position 1 is His, Arg or Tyr; Xaa in position 2 is
 Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu;
 Xaa in position 5 is Ala or Thr; Xaa in position 6 is Ala,
 Phe, Tyr or naphthylalanine; Xaa in position 7 is Thr or Ser;

<220>
 <221> VARIANT
 <222> (8)...(13)
 <223> Xaa in position 8 is Ala, Ser or Thr; Xaa in position 9 is
 Asp or Glu; Xaa in position 10 is Ala, Leu, Ile, Val, pentyl-
 glycine or Met; Xaa in position 11 is Ala or Ser; Xaa in
 position 12 is Ala or Lys; Xaa in position 13 is Ala or Gln;

<220>
 <221> VARIANT
 <222> (14)...(20)
 <223> Xaa in position 14 is Ala, Leu, Ile, pentylglycine, Val or
 Met; Xaa in position 15 is Ala or Glu; Xaa in position 16 is
 Ala or Glu; Xaa in position 17 is Ala or Glu; Xaa in position
 19 is Ala or Val; Xaa in position 20 is Ala or Arg;

<220>
 <221> VARIANT
 <222> (21)...(24)
 <223> Xaa in position 21 is Ala or Leu; Xaa in position 22 is Phe, Tyr or naphthylalanine; Xaa in position 23 is Ile, Val, Leu, pentylglycine, tert-butylglycine or Met; Xaa in position 24 is Ala, Glu or Asp;

<220>
 <221> VARIANT
 <222> (25)...(28)
 <223> Xaa in position 25 is Ala, Trp, Phe, Tyr or naphthylalanine; Xaa in position 26 is Ala or Leu; Xaa in position 27 is Ala or Lys; Xaa in position 28 is Ala or Asn;

<220>
 <221> VARIANT
 <222> (29)...(29)
 <223> Xaa in position 29 is -OH; -NH₂, Gly-Z₂, Gly Gly-Z₂, Gly Gly Xaa₃₁-Z₂, Gly Gly Xaa₃₁ Ser-Z₂, Gly Gly Xaa₃₁ Ser Ser-Z₂, Gly Gly Xaa₃₁ Ser Ser Gly-Z₂, Gly Gly Xaa₃₁ Ser Ser Gly Ala-Z₂, Gly Gly Xaa₃₁ Ser Ser Gly Ala Xaa₃₆-Z₂;

<220>
 <221> VARIANT
 <222> (29)...(29)
 <223> Gly Gly Xaa₃₁ Ser Ser Gly Ala Xaa₃₆ Xaa₃₇-Z₂; or Gly Gly Xaa₃₁ Ser Ser Gly Ala Xaa₃₆ Xaa₃₇ Xaa₃₈-Z₂;

<220>
 <221> VARIANT
 <222> (29)...(29)
 <223> where Xaa₃₁, Xaa₃₆, Xaa₃₇ and Xaa₃₈ are independently Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine or N-alkylalanine; and Z₂ is -OH or -NH₂;

<220>
 <221> VARIANT
 <222> (3)...(28)
 <223> provided that no more than three of Xaa in positions 3, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24, 25, 26, 27 and 28 are Ala.

<400> 4

Xaa	Xaa	Xaa	Gly	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5				10						15	
Xaa	Ala	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	
			20					25							

<210> 5
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 <212> PRT
 <213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (30)...(30)

<223> amidated Gly (Glycinamide)

<400> 5

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly
			20				25					30	

<210> 6

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 6

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20				25				

<210> 7

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 7

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 8
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 8

His Ala Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 9
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 9

His Gly Glu Gly Ala Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 10
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 10

His Gly Glu Gly Thr Ala Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 11
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 11

His Gly Glu Gly Thr Phe Thr Ala Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 12
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 12

His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 13
 <211> 28
 <212> PRT
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<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 13

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ala Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 14
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 14

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Ala Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 15
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 15

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Ala	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 16

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 16

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Ala	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 17

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 17

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 18

<211> 28

<212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 18

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Ala
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 19
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 19

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Ala	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20				25				

<210> 20
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 20

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Ala Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 21
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 21

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Ala Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 22
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 22

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Ala Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 23
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 23

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Ala Phe Leu Lys Asn
 20 25

<210> 24
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 24

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Ala Leu Lys Asn
 20 25

<210> 25
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 25

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Ala Lys Asn
 20 25

<210> 26
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 26

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Ala Asn
 20 25

<210> 27
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Ala (Alaninamide)

<400> 27

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Ala
 20 25

<210> 28
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (38)...(38)
 <223> amidated Pro (Prolinamide)

<400> 28

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro										
			35												

<210> 29
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (38)...(38)
 <223> amidated Pro (Prolinamide)

<400> 29

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro	Pro										
			35												

<210> 30
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (37)...(37)
 <223> amidated Pro (Prolinamide)

<400> 30

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro
 35

<210> 31
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (37)...(37)
 <223> amidated Pro (Prolinamide)

<400> 31

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
 20 25 30
 Ser Gly Ala Pro Pro
 35

<210> 32
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (36)...(36)
 <223> amidated Pro (Prolinamide)

<400> 32

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15
 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala Pro
35

<210> 33
<211> 36
<212> PRT
<213> Artificial Sequence

<220>
<223> artificially synthesized sequence intended to act on
exendin agonist

<220>
<221> AMIDATION
<222> (36)...(36)
<223> amidated Pro (Prolinamide)

<400> 33

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala Pro
35

<210> 34
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> artificially synthesized sequence of novel exendin agonist
compound

<220>
<221> AMIDATION
<222> (35)...(35)
<223> amidated Ala (Alaninamide)

<400> 34

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30

Ser Gly Ala
35

<210> 35
<211> 35
<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (35)...(35)

<223> amidated Ala (Alaninamide)

<400> 35

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly	Ala
		35

<210> 36

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (34)...(34)

<223> Amidated Gly (Glycinamide)

<400> 36

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser	Gly
-----	-----

<210> 37

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (34)...(34)

<223> amidated Gly (Glycinamide)

<400> 37

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser Gly

<210> 38

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (33)...(33)

<223> amidated Ser (Serinamide)

<400> 38

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser

<210> 39

<211> 33

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (33)...(33)

<223> amidated Ser (Seinamide)

<400> 39

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

20

25

30

Ser

<210> 40

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (32)...(32)

<223> amidated Ser (Serinamide)

<400> 40

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

<210> 41

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (32)...(32)

<223> amidated Ser (Serinamide)

<400> 41

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

<210> 42

<211> 31

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (31)...(31)
 <223> amidated Pro (Prolinamide)

<400> 42

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro
 20 25 30

<210> 43
 <211> 31
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (31)...(31)
 <223> amidated Pro (Prolinamide)

<400> 43

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro
 20 25 30

<210> 44
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (30)...(30)
 <223> amidated Gly (Glycinamide)

<400> 44

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly
 20 25 30

<210> 45
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (29)...(29)
 <223> amidated Gly (Glycinamide)

<400> 45

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly			
			20				25								

<210> 46
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (29)...(29)
 <223> amidated Gly (Glycinamide)

<400> 46

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly			
			20				25								

<210> 47
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <223> Xaa in positions 31, 36, 37 and 38 stands for thioproline.

<220>
 <221> AMIDATION
 <222> (38)...(38)
 <223> amidated tPro (Thioprolinamide)

<400> 47

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20				25						30		
Ser	Gly	Ala	Xaa	Xaa	Xaa										
			35												

<210> 48
 <211> 38
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <223> Xaa in positions 36, 37 and 38 stands for thioproline.

<220>
 <221> AMIDATION
 <222> (38)...(38)
 <223> amidated tPro (Thioprolinamide)

<400> 48

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20				25						30		
Ser	Gly	Ala	Xaa	Xaa	Xaa										
			35												

<210> 49
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <223> Ala in position 31 is N-methyl ala.

<220>
 <221> AMIDATION
 <222> (37)...(37)
 <223> amidated Pro (Prolinamide)

<400> 49

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Ala	Ser
			20					25					30		
Ser	Gly	Ala	Pro	Pro											
			35												

<210> 50
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <223> Ala in positions 31, 36 and 37 is N-methyl ala.

<220>
 <221> AMIDATION
 <222> (37)...(37)
 <223> amidated N-methyl ala (N-methyl alaninamide)

<400> 50

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	
Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Ala	Ser
			20					25					30		
Ser	Gly	Ala	Ala	Ala											
			35												

<210> 51
 <211> 37
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <223> Xaa in positions 31, 36 and 37 stands for homoproline.

<220>

<221> AMIDATION
 <222> (37)...(37)
 <223> amidated hPro (Homoprolinamide)

<400> 51

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa	Xaa
			35	

<210> 52
 <211> 36
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <223> Xaa in positions 31 and 36 stands for homoproline.

<220>
 <221> AMIDATION
 <222> (36)...(36)
 <223> amidated hPro (Homoprolinamide)

<400> 52

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly	Xaa	Ser
			20					25					30		

Ser	Gly	Ala	Xaa
			35

<210> 53
 <211> 35
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (35)...(35)
 <223> amidated Ala (Alaninamide)

<400> 53

Arg Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 20 25 30

Ser Gly Ala
 35

<210> 54

<211> 30

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (30)...(30)

<223> amidated Gly (Glycinamide)

<400> 54

His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly
 20 25 30

<210> 55

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 6 stands for naphthylalanine.

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 55

His Gly Glu Gly Thr Xaa Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn
 20 25

<210> 56
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 56

His	Gly	Glu	Gly	Thr	Phe	Ser	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
		20					25				

<210> 57
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 57

His	Gly	Glu	Gly	Thr	Phe	Ser	Thr	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu
1				5				10					15		

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
		20					25				

<210> 58
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <221> AMIDATION
 <222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 58

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Glu	Leu	Ser	Lys	Gln	Met	Ala	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25			

<210> 59

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 10 stands for pentylglycine.

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 59

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Xaa	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25			

<210> 60

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in position 22 stands for naphthylalanine.

<220>

<221> AMIDATION

<222> (28)...(28)

<223> amidated Asn (Asparaginamide)

<400> 60

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu Ala Val Arg Leu Xaa Ile Glu Phe Leu Lys Asn
 20 25

<210> 61
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <223> Xaa in position 23 stands for tert-butylglycine.

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 61

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Xaa Glu Trp Leu Lys Asn
 20 25

<210> 62
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist
 compound

<220>
 <221> AMIDATION
 <222> (28)...(28)
 <223> amidated Asn (Asparaginamide)

<400> 62

His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
 1 5 10 15

Glu Ala Val Arg Leu Phe Ile Asp Phe Leu Lys Asn
 20 25

<210> 63
 <211> 33
 <212> PRT
 <213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (33)...(33)

<223> amidated Ser (Serinamide)

<400> 63

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Leu	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly	Pro	Ser
			20					25					30		

Ser

<210> 64

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> AMIDATION

<222> (29)...(29)

<223> amidated Gly (Glycinamide)

<400> 64

His	Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Ala	Ser	Lys	Gln	Met	Glu	Glu
1				5					10					15	

Glu	Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly
			20					25				

<210> 65

<211> 37

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Xaa in positions 31, 36 and 37 stand for homoproline.

<220>

<221> AMIDATION

<222> (37)...(37)

<223> amidated hPro (homoprolinamide)

<400> 65

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His Gly Glu Gly Thr Phe Thr Ser Asp Ala Ser Lys Gln Met Glu Glu
 1           5           10           15

Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Xaa Ser
      20           25           30

Ser Gly Ala Xaa Xaa
      35

```

<210> 66

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<221> VARIANT

<222> (1)...(6)

<223> Xaa in position 1 is His, Arg, Tyr or 4-imidazopropionyl; Xaa in position 2 is Ser, Gly, Ala or Thr; Xaa in position 3 is Asp or Glu; Xaa in position 5 is Ala or Thr; Xaa in position 6 is Ala, Phe, Tyr or naphthylalanine;

<220>

<221> VARIANT

<222> (7)...(12)

<223> Xaa in position 7 is Thr or Ser; Xaa in position 8 is Ala, Ser or Thr; Xaa in position 9 is Asp or Glu; Xaa in position 10 is Ala, Leu, Ile, Val, pentylglycine or Met; Xaa in position 11 is Ala or Ser; Xaa in position 12 is Ala or Lys;

<220>

<221> VARIANT

<222> (13)...(19)

<223> Xaa in position 13 is Ala or Gln; Xaa in position 14 is Ala, Leu, Ile, pentylglycine, Val or Met; Xaa in position 15 is Ala or Glu; Xaa in position 16 is Ala or Glu; Xaa in position 17 is Ala or Glu; Xaa in position 19 is Ala or Val;

<220>

<221> VARIANT

<222> (20)...(22)

<223> Xaa in position 20 is Ala or Arg; Xaa in position 21 is Ala, Leu or Lys-NH^f-R where R is Lys, Arg, C₁-C₁₀ straight chain or branched alkanoyl or cycloalkylalkanoyl; Xaa in position 22 is Phe, Tyr or naphthylalanine;

<220>

<221> VARIANT

<222> (23)...(26)

<223> Xaa in position 23 is Ile, Val, Leu, pentylglycine, tert-butylglycine or Met; Xaa in position 24 is Ala, Glu or Asp; Xaa in position 25 is Ala, Trp, Phe, Tyr or naphthylalanine;

Xaa in position 26 is Ala or Leu;

<220>

<221> VARIANT

<222> (27)...(27)

<223> Xaa in position 27 is Lys Asn, Asn Lys, Lys-NH^e-R Asn, Asn Lys-NH^e-R, Lys-NH^e-R Ala, Ala Lys-NH^e-R where R is Lys, Arg, C₁-C₁₀ straight chain or branched alkanoyl or cycloalkyl-alkanoyl;

<220>

<221> VARIANT

<222> (28)...(28)

<223> Xaa in position 28 is -OH; -NH₂; Gly-Z₂; Gly Gly-Z₂; Gly Gly Xaa₃₁-Z₂; Gly Gly Xaa₃₁ Ser-Z₂; Gly Gly Xaa₃₁ Ser Ser-Z₂; Gly Gly Xaa₃₁ Ser Ser Gly-Z₂; Gly Gly Xaa₃₁ Ser Ser Gly Ala-Z₂; Gly Gly Xaa₃₁ Ser Ser Gly Ala Xaa₃₆-Z₂;

<220>

<221> VARIANT

<222> (28)...(28)

<223> Xaa in position 28 is Gly Gly Xaa₃₁ Ser Ser Gly Ala Xaa₃₆ Xaa₃₇-Z₂; or Gly Gly Xaa₃₁ Ser Ser Gly Ala Xaa₃₆ Xaa₃₇ Xaa₃₈-Z₂;

<220>

<221> VARIANT

<222> (28)...(28)

<223> where Xaa₃₁, Xaa₃₆, Xaa₃₇ and Xaa₃₈ are independently selected from the group consisting of Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine, N-alkylpentylglycine or N-alkylalanine; and Z₂ is -OH or -NH₂;

<220>

<221> VARIANT

<222> (3)...(26)

<223> provided that no more than three of Xaa in positions 3, 5, 6, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 24 25 and 26 are Ala.

<400> 66

Xaa	Xaa	Xaa	Gly	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5				10							15	

Xaa	Ala	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
				20											25	

<210> 67

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Gly in position 1 is 4-imidazolylpropionyl-Gly.
Lys in position 26 is Lys-NH^foctanoyl.

<220>
<221> AMIDATION
<222> (27)...(27)
<223> amidated Asn (Asparaginamide)

<400> 67

Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu	Glu
1				5				10					15		

Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn
			20					25		

<210> 68
<211> 27
<212> PRT
<213> Artificial Sequence

<220>
<223> artificially synthesized sequence of novel exendin agonist compound

<220>
<223> Gly in position 1 is 4-imidazolylpropionyl-Gly.
Lys in position 26 is Lys-NH^foctanoyl.

<220>
<221> AMIDATION
<222> (27)...(27)
<223> amidated Asn (Asparaginamide)

<400> 68

Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu	Glu
1				5				10					15		

Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn
			20					25		

<210> 69
<211> 29
<212> PRT
<213> Artificial Sequence

<220>
<223> artificially synthesized sequence of novel exendin agonist compound

<220>
<223> Gly in position 1 is 4-imidazolylpropionyl-Gly.
Lys in position 26 is Lys-NH^foctanoyl.

<220>
<221> AMIDATION

<222> (29)...(29)

<223> amidated Gly (Glycinamide)

<400> 69

Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Met	Glu	Glu	Glu
1				5				10					15		

Ala	Val	Arg	Leu	Phe	Ile	Glu	Trp	Leu	Lys	Asn	Gly	Gly
			20					25				

<210> 70

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Gly in position 1 is 4-imidazolylpropionyl-Gly.

Lys in position 26 is Lys-NH^eoctanoyl.

<220>

<221> AMIDATION

<222> (29)...(29)

<223> amidated Gly (Glycinamide)

<400> 70

Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu	Glu
1				5				10					15		

Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Lys	Asn	Gly	Gly
			20					25				

<210> 71

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Gly in position 1 is 4-imidazolylpropionyl-Gly.

Lys in position 27 is Lys-NH^eoctanoyl.

<220>

<221> AMIDATION

<222> (27)...(27)

<223> amidated Lys (Lysinamide)

<400> 71

Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
 1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Lys
 20 25

<210> 72

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Gly in position 1 is 4-imidazolypropionyl-Gly.
 Lys in position 27 is Lys-NH^ooctanoyl.

<220>

<221> AMIDATION

<222> (27)...(27)

<223> amidated Lys (Lysinamide)

<400> 72

Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu Glu
 1 5 10 15

Ala Val Arg Leu Phe Ile Glu Phe Leu Asn Lys
 20 25

<210> 73

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> artificially synthesized sequence of novel exendin agonist compound

<220>

<223> Gly in position 1 is 4-imidazolypropionyl-Gly.
 Lys in position 27 is Lys-NH^ooctanoyl.

<220>

<221> AMIDATION

<222> (29)...(29)

<223> amidated Gly (Gylcinamide)

<400> 73

Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu Glu
 1 5 10 15

Ala Val Arg Leu Phe Ile Glu Trp Leu Asn Lys Gly Gly
 20 25

<210> 74
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> artificially synthesized sequence of novel exendin agonist compound

<220>
 <223> Gly in position 1 is 4-imidazolylpropionyl-Gly.
 Lys in position 27 is Lys-NH⁶octanoyl.

<220>
 <221> AMIDATION
 <222> (29)...(29)
 <223> amidated Gly (Glycinamide)

<400> 74

Gly	Glu	Gly	Thr	Phe	Thr	Ser	Asp	Leu	Ser	Lys	Gln	Leu	Glu	Glu	Glu
1				5					10				15		

Ala	Val	Arg	Leu	Phe	Ile	Glu	Phe	Leu	Asn	Lys	Gly	Gly
			20					25				